

## **ABSTRACT OF THE DISCLOSURE**

A method and apparatus for tuning a VCO circuit to provide desired modulations is described. In one embodiment, the method of the present invention uses a controlled voltage from a digital-to-analog converter to obtain VCO voltage/frequency characteristics. The VCO voltage/frequency characteristics are used to determine a VCO capacitance value as well as a charge pump current level for each frequency band of interest.

For one embodiment, the VCO circuit includes a bank of switchable capacitors used to set the VCO capacitance value. The charge pump includes a number of switch-controlled current meters to set the charge pump current level. The VCO capacitors and charge pump current meters are controlled by an off-chip CPU.